Nutritionism

Scrinis, Gyorgy (2013) *Nutritionism: The Science and Politics of Dietary Advice*, New York, Columbia University Press 352pp, £22.95 (hardback) ISBN: 978-0-231-15656-1

Gyorgy Scrinis’ historical account of nutrition and its incorporation into North American dietary advice provides a new framework for understanding this history, and a critique of contemporary nutritional messages. In it, he develops an array of new concepts, centred on the idea of nutritionism, here defined as a reductive focus on the nutrient composition of foods combined with a reductive interpretation of the relationship of these nutrients to bodily health (p 2). He describes how healthy eating advice focuses on specific nutrients (fats, protein and vitamins) rather than foods (butter, meat and oranges), and recommends that people adjust their consumption of these foods based on research demonstrating associations between nutrient levels in diets and later health outcomes. The best known of these recommendations is the advice to reduce consumption of saturated fats in order to prevent heart disease. He argues that this reductionism ultimately derives from the ways in which nutrition science research has been used to define healthy diets by nutrition researchers, government agencies and the food industry.

Scrinis characterises three eras in the development of healthy eating advice. The first of these, the era of quantifying nutritionism, begins in the mid-nineteenth century, when calories were first used to measure the adequacy of diets, vitamins were discovered and the developing processed food industry began to use this knowledge to develop and advertise new products. At this time, the focus was on the protective effects of protein and specific vitamins, and on preventing deficiencies to promote growth and prevent disease. The second era, of good and bad nutrients, dates from the growth of medical concern over chronic diseases, especially heart disease, in the 1960s. In this period, government agencies started to focus on differentiating between health promoting and harmful nutrients in order to protect populations at risk from chronic diseases due to over-consumption.

The third era, starting in the mid-1990s, is the era of functional nutritionism, when nutrients and individual foodstuffs come to be seen as both functional and health enhancing. This era focuses on the relationship between nutrients and internal bodily functions - often monitored using biomarkers - in order to enhance health and specific bodily functions. Functional nutritionism is characterised by a greater emphasis on the beneficial health-enhancing properties of certain nutrients, such as omega-3 fats and vitamin D. New claims are made about links between omega-3 deficiency and an increased risk of heart disease, cancer and arthritis, and an increasing number of foods are promoted on the basis of their naturally occurring or fortified/re-engineered high levels of these nutrients. Scrinis argues that in this third era, nutrition advice has shifted once more to focus less on the dangers of too much saturated fat and processed carbohydrates, and more on the ill effects resulting from

insufficient consumption of this new range of compounds that also includes antioxidants, folate and phytochemicals. Eating a varied and balanced diet no longer appears to be sufficient, and so functional nutritionism leads to demands for superfoods, nutritionally engineered foods and dietary supplements. It is also associated with the development of personalised nutrition and nutrigenomic research.

This book is a useful account of the history of contemporary American nutrition advice, with well chosen case studies - including an account of changing attitudes to margarine – that effectively illustrate its over-arching themes. However, I think Scrinis' account of nutrition science overstates the dominance of reductionist approaches within both nutrition science and food policy. Firstly, the proximity of large-scale commercial interests has made nutrition science and food policy much less monolithic than his account implies. The food industry actively develops and promotes competing accounts of the effects on health of particular foods and nutrients, and this had led to recurring controversies over healthy eating advice. Secondly, the history of nutrition science in the UK and the US demonstrates an ongoing and unresolved tension between reductionist and holistic accounts of the relationship between diet and health. Given his use of wholefood-based arguments as the basis for his alternative food quality paradigm, it is unfortunate that Scrinis overlooks the extent to which they, and other 'unorthodox' approaches, have been present within mainstream nutrition advice. In his paradigm, nutritional science is seen as one source of knowledge about the value of food which needs to be considered alongside traditional and experiential knowledge of food production and preparation. But it is not clear to me how these other forms of knowledge can be successfully used to create contemporary healthy eating advice. Social scientific analyses of contemporary biomedicine often rely on the assumption that reductionist approaches are problematic without acknowledging that reductionism is a powerful tool for scientific research, or suggesting equivalent alternative approaches. Despite my sympathy for many of his arguments, Scrinis ultimately falls into this camp, for me, because he puts forward such an undernourished alternative paradigm.